MULTISERVICE LEXICON

August 2000

1. PURPOSE. This MULTISERVICE LEXICON provides a list of uncommon Operational Test and Evaluation (OT&E) terms used by each of the Operational Test Agencies (OTA). Appendix 1 describes the test event processes used by the OTAs.

2. BACKGROUND. Although each of the OTAs is responsible for its Service's Operational Test and Evaluation, the difference in their overall roles generates some differences in definitions and terminology. The OTA Commanders chartered a working group to provide a list of uncommon terms among the OTAs thus providing an increased understanding between the OTAs.

3. RESPONSIBILITIES. Each OTA is responsible for the management of Lexicon terms defined and submitted by them. After each term, the submitting OTA is identified. Service OTAs can request that other Service OTAs provide for the Lexicon the definitions of terms the other OTA uses. Definitions for requested terms shall be provided at the discretion of the OTA receiving the request. Current points of contact are listed below.

OTA	Name	Phone Number	DSN	FAX
AFOTEC	Maj. John F. Stribling	505-846-9638	246	5214
ATEC	Ms. Dianne Luna	703-681-6818	761	6914
OPTEVFOR	Mr. Steven Whitehead	757-444-5546 Ext. 3302	564	Comm 445-8932 DSN 565-8932
MCOTEA	Dr. R. Bell	703-784-3141	278	2472

4. UPDATE. Prior to each scheduled OTA Commanders' Conference, the designated OTA indicated below will be responsible for staffing the Multiservice Lexicon among the OTAs for new or obsolete terms.

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MULTISERVICE LEXICON

ACCREDITATION *(U.S. Army)*

Accreditation is the official determination that a model, simulation, or federation of modeling and simulation is acceptable for use for a specific purpose. ATEC accredits all M&S that appreciably affects an overall system evaluation (i.e., any M&S planned as a primary data source to supplement test data). The accreditation authority is the approver of the evaluation or assessment document. Any M&S used to support or supplement T&E, that in turn supports an independent evaluation or assessment, must be accredited by ATEC.

ACQUISITION CATEGORY (ACAT) IV-M OR IV-T PROGRAMS *(U.S. Marine Corps)*

ACAT IV-M programs are managed under the DOD 5000 series of acquisition procedures but do not require OT&E. The recommendation to assign an IV-M classification to a program is endorsed by MCOTEA in accordance with SECNAVINST 5000.2B. ACAT IV-T programs require OT&E support, just like ACAT III, II, IC, and ID programs.

ATEC SYSTEM TEAM (AST) *(U.S. Army)*

A multi-disciplined team composed of representatives from ATEC's sub-commands. This team is assigned responsibility for planning, testing or experimentation, and evaluation of a given system.

BRASSBOARD CONFIGURATION *(U.S. Army)*

An experimental device (or group of devices) used to determine feasibility and to develop technical and operational data. It will normally be a model sufficiently hardened for use outside of laboratory environments to demonstrate the technical and operational principles of immediate interest. It may resemble the end-item but is not intended for use as the end-item.

COMBINED DEVELOPMENTAL TEST AND OPERATIONAL TEST (DT/OT)
(U.S. Army)

A single test event conducted in distinct phases to produce data to answer developmental and operational system issues. In combined DT/OT, there is a DT phase and an OT phase with the DT test officer in charge of the DT phase and the OT test officer in charge of the OT phase. The DT phase focuses on generation of technical data and may permit program manager (PM) and system contractor involvement. The OT phase focuses on generation of operational test data with limited PM involvement and no system contractor involvement.

CONCEPT EXPERIMENTATION PROGRAM (CEP) *(U.S. Army)*

The CEP provides the combat developer (U.S. Army Training and Doctrine Command (TRADOC)) with a quick reaction and simplified process to resolve combat development, doctrinal, and training issues. It is a warfighting experimentation program that provides the ability to investigate the military utility of and capitalize on technologies, materiel, and warfighting ideas. It also solidifies combat development requirements documents and supports early milestone decisions. In addition, CEP tests are used to provide an experimental database for requirement documents and to expedite the materiel acquisition process. CEP tests are not to be used as the primary data source to support production decisions.

CONTINUOUS EVALUATION *(U.S. Army)*

A process that provides the continuous flow of information regarding system status, including planning, testing, data compilation, analysis, evaluation, conclusions, and reporting to all members of the acquisition team from the drafting of the initial operational requirements document through deployment reviews and assessment. All members of the acquisition team perform continuous evaluation.

CUSTOMER TEST (CT) *(U.S. Army)*

A test conducted by ATEC for a customer or requesting agency external to ATEC. The requesting agency coordinates support requirements and provides funds and guidance for the test. The test is not directly responsive to independent evaluation in support of a milestone decision review and is not scheduled or approved by the Army's Test Schedule and Review Committee (TSARC) unless external sources are required for test support.

DATA MANAGEMENT AND ANALYSIS PLAN *(U.S. Air Force)*

Data Management and Analysis Plan is used to describe the collection and utilization of data. It is used to assist in the test execution and reporting task by means of sort and print routines for direct inclusion of data into required reports. Formatting the descriptive statistical data in plots or histograms can be readily accomplished.

DETAILED ASSESSMENT PLAN (DAP) *(U.S. Marine Corps)*

The DAP is prepared by MCOTEA and is essentially a tasking to the Test Director (TD), telling him/her what needs to be accomplished during a specific Operational Assessment (OA) evolution. The DAP contains the test objectives, issues, criteria, measures of effectiveness, data requirements, special events, etc. The DAP is not an event schedule, but should provide the level of detail required for the TD to prepare such a schedule. Used only for Early Operational Assessments and OAs.

DETAILED TEST PLAN (DTP) *(U.S. Army)*

The Army DTP is an event-level document that is developed to outline specific, highly detailed instructions, missions, tasks, organization, and procedures on how the test event(s) will be conducted.

DETAILED TEST PLAN (DTP) *(U.S. Marine Corps)*

The DTP is prepared by MCOTEA and is essentially a tasking to the Test Director (TD), telling him/her what needs to be accomplished during a specific OT&E evolution. The DTP contains the test objectives, issues, criteria, measures of effectiveness, data requirements, special test events, etc. The DTP is not an event schedule, but should provide the detail required for the Test Director to prepare such a schedule. Used only for Initial Operational Test and Evaluations (IOT&Es) and Follow-on Operational Test and Evaluations (FOT&Es).

DETAILED TEST PROCEDURES *(U.S. Air Force)*

The Detailed Test Procedures are written to implement the OT&E test plan. It is written and maintained by the test team, with assistance from the TSG. The Detailed Test Procedures describe, in detail, how the test team will execute the test. It is a working level reference document that provides an audit trail of test planning decisions, rationale, and records.

EARLY INVOLVEMENT (EI) *(U.S. Air Force)*

Typically starting at Phase O, involvement by the OTA to inject operational test and evaluation issues and concerns as soon as possible in the acquisition program. The intent is to achieve cost and schedule savings by recommending improvement in operational effectiveness and suitability into the design of the system.

EARLY USER TEST OR EXPERIMENTATION (EUT/E) *(U.S. Army)*

Testing or experimentation that employs user personnel during the proof of principle (or Program Definition and Risk Reduction) phase before entering Engineering and Manufacturing Development Phase (i.e., pre-milestone II). The purposes are to test a materiel concept, to support planning for training and logistics, to identify interoperability problems and future testing requirements, and to provide data for an operational evaluation to support the milestone I or II decision.

ELECTROMAGNETIC ENVIRONMENTAL EFFECTS *(U.S. Army)*

The impact of the electromagnetic environment on the operational capability of military forces, equipment, systems, and platforms. These effects encompass all electromagnetic disciplines, including electromagnetic compatibility; electromagnetic interference; electromagnetic vulnerability; electromagnetic pulse; electronic counter-

countermeasures; hazards of electromagnetic radiation to personnel, ordnance, and volatile materials; and natural phenomena effects of lightning and p-static.

EVENT DESIGN PLAN (EDP) *(U.S. Army)*

The EDP contains detailed information on event design, methodology, scenarios, instrumentation, simulation and stimulation, data management, and all other requirements necessary to support the evaluation requirements stated in the System Evaluation Plan (SEP).

FIVE YEAR TEST PROGRAM (FYTP) *(U.S. Army)*

A compendium of Army Test Schedule and Review Committee (TSARC) recommended and HQDA ODCSOPS approved Outline Test Plans (OTPs) in the following five years. The FYTP identifies validated requirements to support the Army's user test programs. It is developed within the existing budget and program constraints IAW Army priorities. It is a tasking document for the current and budget years and provides test-planning guidelines for the subsequent years.

FIVE-YEAR MASTER TEST PLAN *(U.S. Marine Corps)*

MCOTEA's brief listing of the programs requiring active OT&E during the forthcoming five years. Includes estimates of timeframes, locations, manpower required, and FMF source of resources. Updated quarterly; in form of message.

FOLLOW-ON OPERATIONAL TEST AND EVALUATION (FOT&E) *(U.S. Army)*

The test and evaluation conducted during and after the production phase to refine information obtained during the IOT&E. The FOT&E is also used to provide data to evaluate system changes or improvements and to provide data to reevaluate the system to ensure that is continues to meet operational needs.

FOLLOW-ON OPERATIONAL TEST AND EVALUATION (FOT&E)
(U.S. Marine Corps)

That OT&E done to support the acquisition Process after Milestone III full rate production decisions. FOT&E follows strict Title 10 and DOD guidance regarding:

Contractor participation
Number of test articles being determined by the OTA
Testing in an OT&E environment
An independent phase of OT&E required when combined DT/OT strategy is employed

FORCE DEVELOPMENT TEST OR EXPERIMENTATION (FDT/E) *(U.S. Army)*

The testing conducted early to support the force development and experimentation processes by examining the effectiveness of existing or proposed concepts of training, logistics, doctrine, organization, and materiel. FDT/E tests are conducted early and can be scheduled as needed during any phase of the acquisition process. They may be related to, combined with or used to supplement operational testing. During the requirement formulation effort, FDT/E tests may be used to determine essential and desirable capabilities or characteristics of proposed systems. Before milestone II, FDT/E tests are used to assist in refining concepts of employment, logistics, organization and personnel, training, and in lieu of early operational testing when operational issues are adequately addressed. FDT/E tests also include field experiments designed to gather data through instrumentation to address a training development problem or to support simulations, war-games, and other analytical studies.

FOREIGN COMPARATIVE TESTING *(U.S. Army)*

The test and evaluation of NATO and non-NATO Allies' defense equipment to determine whether such equipment meets valid existing DOD Component requirements or mission area shortcomings, while reducing duplication in research and development, enhancing standardization and interoperability, improving cooperative support, and promoting competition and international technology exchange.

INDEPENDMENT ASSESSMENT REPORT (IAR) *(U.S. Marine Corps)*

Issued to report findings of an Operational Assessment (OA) or an Early Operational Assessment (EOA).

INDEPENDENT EVALUATION *(U.S. Army)*

The process used by the independent evaluators to independently determine if the system satisfies the approved requirements. It will render an assessment of data from all sources, simulation and modeling, and an engineering or operational analysis to evaluate the adequacy and capability of the system.

INDEPENDENT EVALUATOR *(U.S. Army)*

An individual in a command or agency, independent of the MATDEV and the user, that conducts overall evaluations of system's operational effectiveness, suitability and survivability.

INDEPENDENT EVALUATION REPORT (IER) *(U.S. Marine Corps)*

Issued to report findings of Initial Operational Test and Evaluation (IOT&E) or Follow-on Operational Test and Evaluation (FOT&E).

INITIAL OPERATIONAL TEST AND EVALUATION (IOT&E) *(U.S. Army)*

The dedicated field test and evaluation, under realistic combat conditions and employing typical user personnel, of production or production-representative items of weapons, equipment, or munitions. The purpose of the IOT&E is to provide data to determine the operational effectiveness, suitability, and survivability of these items for use by representative military or civilian users. An IOT&E is required prior to full-rate production and fielding. An IOT&E will not be combined with DT.

INITIAL OPERATIONAL TEST AND EVALUATION (IOT&E) *(U.S. Marine Corps)*

That OT&E done to support the acquisition process Milestone III full-rate production decisions. IOT&E follows strict Title 10 and DOD guidance regarding:

Contractor participation
Production representative test articles
Number of test articles being determined by the OTA
Testing in an OT&E environment
An independent phase of OT&E required when a combined DT/OT strategy is employed

INITIAL OPERATIONAL TEST AND EVALUATION (IOT&E) *(U.S. Air Force)*

All operational test and evaluation conducted on production or production-representative articles to support the decision to proceed beyond low-rate initial production (LRIP) for a weapon system program. It is conducted to provide a valid estimate of expected system operational effectiveness and operational suitability.

INTEGRATED DT/OT *(U.S. Army)*

Integrated DT/OT is an event that generates data to address developmental and operational issues simultaneously under operational conditions. The test team in charge of this event is determined through coordination within the test commands based on the requirements of the program and the test. Integrated DT/OT events will comply with all statutory and regulatory requirements found in U.S.C. Title 10, Section 2399 and regulatory requirements found in DOD Regulation 5000.2-R and Army Regulation 73-1. As a general rule, DT/OT (combined or integrated) is more appropriate earlier rather than later in the T&E program.

JOINT RELIABILITY AND MAINTAINABILITY EVALUATION TEAM (JRMET) *(U.S. Air Force)*

The JRMET is responsible for collecting, analyzing, and categorizing reliability and maintainability (R&M) data during DT&E and OT&E. It is chaired by the single manager (SM) or designated representative and includes representatives from the supporting and operating commands, the DT&E and OT&E test teams, and, when appropriate, system

contractor personnel as nonvoting members. Single manager is a government official (military or civilian) who is responsible and accountable for decisions and overall management of a system, product group, or material group.

LIMITED USER TEST (LUT) *(U.S. Army)*

A LUT is any type of RDTE funded operational test conducted between milestone II and milestone III other than the IOT. The LUT normally addresses a limited number of operational issues. The LUT may be conducted to provide a data source for operational assessments in support of LRIP decisions and for reviews conducted before IOT. The LUT may be conducted to verify fixes to problems discovered in IOT that must be verified prior to milestone III (that is, the fixes are of such importance that verification cannot be deferred to an FOT&E). The LUT is not used to circumvent requirements for an IOT before a full-production decision as prescribed by statute, DOD directives, and Army policy.

MCOTEA-DERIVED CRITERION *(U.S. Marine Corps)*

A criterion in a Detailed Test Plan or Detailed Assessment Plan where both the criterion and the threshold are not found in the ORD. In this case, the criterion is derived by MCOTEA and the threshold that allows the criterion to be evaluated and resolved is established by MCOTEA. Here, neither the criterion nor the threshold have been validated or approved by the requirements generation authority.

MODELING AND SIMULATION *(U.S. Army)*

A model is a representation of an object, system or process (or part thereof) in mathematical, physical, or logical terms. A simulation is a technique for experimentation in which the operation and dynamics of a real-world system are represented by the exercise of some different system, usually involving one or more models. M&S can be used to assist test planning, enhance instrumentation, serve as a test driver, serve as an additional source of data required for evaluation, and save valuable resources during the conduct of a test. Accreditation of modeling and simulation is required when the results directly or indirectly are used in an evaluation report. As a condition for proceeding beyond low-rate initial production, the system evaluation may not be comprised of data based solely on computer modeling or simulation.

OPERATIONAL ASSESSMENT (OA) *(U.S. Marine Corps)*

Testing and evaluation done before IOT&E to support the acquisition process. This testing and evaluation is not “OT&E” under the definitions of Title 10 and DOD guidance, and is not constrained by the strict guidance in these documents. For example:

Contractor participation is not constrained
Test articles do not have to be production representative
Number of test articles not determined by the OTA
Testing does not have to be conducted in an OT&E environment
Independent OT phase is not required when a combined DT/OT strategy is employed

OPERATIONAL EVALUATION (OPEVAL) *(U.S. Navy)*

The last IOT&E phase of testing that directly supports the Milestone III decision. OPEVAL is the final test that will support evaluations of effectiveness and suitability.

OPERATIONAL EFFECTIVENESS *(U.S. Army)*

The overall degree of mission accomplishment of a system when used by representative personnel in the expected (or planned) environment. Some examples of environment are: natural, electronic, threat, and so forth for operational employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat (including countermeasures; initial nuclear weapons effects; nuclear, biological, and chemical contamination threats).

OPERATIONAL IMPACT ASSESSMENT (OIA) *(U.S. Air Force)*

Identifies potential impacts to the outcome of the battlefield operation to include the following: potential force employment considerations, CONOPS issues, and operational impacts due to introduction of the system into battlefield operations.

OPERATIONAL SUITABILITY *(U.S. Army)*

The degree to which a system can be satisfactorily placed in field use with consideration given to availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistic supportability, and training requirements.

OPERATIONAL SURVIVABILITY *(U.S. Army)*

Survivability is the capability of a system and crew to avoid or withstand a man-made hostile environment without suffering an abortive impairment of its ability to accomplish its designated mission.

OPERATIONAL TEST (OT) *(U.S. Army)*

A generic term that encompasses the range of testing and experimentation conducted in realistic operational environments, with users that are representative of those expected to operate, maintain, and support the system when fielded or deployed.

OPERATIONAL TEST (NOMENCLATURE) *(U.S. Navy)*

OPTEVFOR identifies Operational Testing phases using an alphanumeric scheme. This scheme consists of an "OT" followed by a Roman Numeral, which denotes the acquisition phase the testing occurs during, and a letter, which denotes the sequence of the test period within the phase. For example, OT-IIC denotes the third test period during phase II. If OT-IIC is the last period of Operational Test for Phase II, then it will also be identified as "OPEVAL," as defined elsewhere in this LEXICON.

OPERATIONAL TEST PROJECT OFFICER (OTPO) *(U.S. Marine Corps)*

Marine Corps Officer at MCOTEA who is point-of-contact for an ACAT program, and who is tasked with designing and implementing the OT&E profile for that program.

OPERATIONAL TESTER *(U.S. Army)*

A command or agency whose responsibility is to plan, conduct, and report the results of operational testing. The operational tester is normally ATEC.

OPERATIONAL UTILITY EVALUATION (OUE) *(U.S. Air Force)*

Highly streamlined, flexible OT&E activities designed to obtain quick-look assessments of military worth. They are used anytime testing does not fall into one of the other major categories of OT&E. OUEs are highly flexible in planning and reporting formats, and adjustable to customer needs. They are conducted outside the normal scope of operational testing activities, and are limited in time, scope, and resources. They may be responsibilities to the appropriate air force major command (MAJCOM), program executive officer (PEO), or designated acquisition commander (DAC), for a specific system and subsystem's development, acquisition, concept direction study, or modification. The PMD states the program's unique requirements, goals, and objectives, especially those to be met at each acquisition milestone or program review.

OUTLINE TEST PLAN (OTP) *(U.S. Army)*

An OTP is a formal resource document prepared for Test Schedule and Review Committee (TSARC) review. It contains resource and administrative information necessary to support a user T&E. OTPs are also prepared for DT when soldier participants or other operational resources are required. The OTP contains the critical test issues, test conditions, scope, tactical context (user T&E only), resource requirement suspense dates, test milestone dates, and cost estimates (for user T&E only). OTP preparation guidance is issued by the ATEC.

PILOT PRODUCTION ITEM *(U.S. Army)*

An item produced from a limited production run on production tooling to demonstrate the capability to mass-produce the item.

PROGRAM MANAGEMENT DIRECTIVE *(U.S. Air Force)*

The official Air Force document used to direct acquisition or modification responsibilities to the appropriate air force major command (MAJCOM), program executive officer (PEO), or designated acquisition commander (DAC), for a specific system and subsystem's development, acquisition, concept direction study, or modification. The PMD states the program's unique requirements, goals, and objectives, especially those to be met at each acquisition milestone or program review.

PRE-PRODUCTION PROTOTYPE *(U.S. Army)*

An article in final form employing standard parts and representative of articles to be produced on a production line with production tooling.

PROGRAM MANGER (PM) *(U.S. Army)*

A DA board selected manager (military or civilian) of a system or program. A program manager may be subordinate to the AAE, PEO, or a materiel command Commander.

QUALIFICATION OPERATIONAL TEST AND EVALUATION *(U.S. Air Force)*

The operational testing performed on programs instead of IOT&E for which there is no RDT&E-funded developmental effort.

REALISTIC TEST ENVIRONMENT *(U.S. Army)*

The conditions under which a system is expected to be operated and maintained, including the natural weather and climatic conditions, terrain effects, battlefield disturbances, and enemy threat conditions.

REQUIREMENTS CORRELATION MATRIX *(U.S. Air Force)*

A three-part matrix or spreadsheet required by the Air Force to provide an audit trail of system capabilities and characteristics identified in the Operational Requirements Document (ORD). It lists thresholds and objectives; identifies user recommended key performance parameters; provides supporting rationale justifying each threshold; and preserves rationale for changes in requirements as the system matures.

SAFETY RELEASE *(U.S. Army)*

A formal document issued by the developmental tester to the operational test organization indicating that the system is safe for use and maintenance by typical user troops and describing the specific hazards of the system based on test results, inspections, and system safety analyses.

SOFTWARE QUALIFICATION TEST (SQT) *(U.S. Army)*

A system test conducted by the developmental tester using live-data files supplemented with user prepared data and executed on target hardware. The objectives of the software qualification test are to obtain Government confirmation that the design will meet performance and operational requirements and to determine the adequacy and timeliness of any corrective action indicated by previous testing. The SQT is typically conducted during the Engineering and Manufacturing Development phase between milestone II and III.

SUPPLEMENTAL SITE TEST *(U.S. Army)*

A test that may be necessary for information systems that execute in multiple hardware and operating system environments if there are differences between user locations that could affect performance or suitability. It supplements the IOT.

SURVEILLANCE TESTS *(U.S. Army)*

Destructive and nondestructive tests of materiel in the field or in storage at field, depot, or extreme environmental sites. Surveillance tests are conducted to determine suitability of fielded or stored materiel for use, evaluate the effects of environments, measure deterioration, identify failure modes, and establish or predict service and storage life. Surveillance test programs may be at the component-through-system level.

SOFTWARE QUALIFICATION TESTING (SQT) *(U.S. Navy)*

Post-Milestone III software testing, that is solely intended for a fleet release recommendation of software, shall be conducted by COMOPTEVFOR as SQT. SQT applies to software modifications of limited scope, as determined by CNO (N091), such as aircraft and weapons systems operational flight programs (OFPs) and other systems in which software provides a similar function.

STRATEGY-to-TASK *(U.S. Air Force)*

A logical linking of the national security strategy to the operational tasks that must be accomplished.

SUBTEST *(U.S. Army)*

An element of a test program. A subtest is a test conducted for a specific purpose (for example, rain, dust, transportability, missile firing, and fording).

SYSTEM *(U.S. Army)*

An item or group of items that consists of materiel and/or software that when put in the hands of users will enable users to accomplish assigned missions.

SYSTEM ANALYSIS REPORT (SAR) *(U.S. Army)*

The purpose of the SAR is to document the analysis that supports ATEC recommendations in a System Evaluation Report (SER) and -when required, in a System Assessment (SA). The SAR provides the detailed analysis supporting the SER in enough detail to allow anyone to reconstruct the data and perform analyses without having to rely on the original analyst's or evaluator's expertise. The SAR provides the analysis supporting a SA only when the analysis is too detailed for inclusion in the SA.

SYSTEM ASSESSMENT (SA) *(U.S. Army)*

The SA provides an assessment of the progress toward achieving system requirements and resolution of issues. The SA is not tied to a milestone decision review, but is developed as required. It is typically produced as input to on-milestone decisions and to support system evaluation. It may identify needed modifications; provide information on tactics, techniques, doctrine, organizations, and personnel requirements; and evaluate the system's logistical supportability. The scope of issues addressed by the SA is flexible because it may or may not cover all aspects of effectiveness, suitability, and survivability.

SYSTEM CHANGE *(U.S. Army)*

A system change is defined as a modification or upgrade to an existing system. A modification is a change to a system that is still in production. An upgrade is a change to a system that is out of production. Such changes can be improvements to system capabilities or fixes to correct deficiencies after Milestone III. System modifications and upgrades include multi-system changes (i.e., the application of a common technology across multiple systems), block changes, preplanned product improvements, Class I Engineering Change Proposals (see MIL STD 973), and system change packages.

SYSTEM EVALUATION PLAN (SEP) *(U.S. Army)*

The SEP documents the evaluation strategy and overall Test and Simulation Execution Strategy (T&SES) effort of a system for the entire acquisition cycle through fielding. Integrated T&E planning is documented in a SEP. The detailed information contained in the SEP supports paralleled development of the TEMP and is focused on evaluation of operational effectiveness, suitability, and survivability. While the documents are similar, the TEMP establishes "what" T&E will be accomplished and the SEP explains "how" the T&E will be performed.

SYSTEM EVALUATION REPORT (SER) *(U.S. Army)*

The ATEC SER provides the decision authority with an independent evaluation of (or progress toward achieving) a system's effectiveness, suitability and survivability for the milestone decision reviews. The SER is a system level report that integrates the information from various event-level reports into an overall assessment of the system.

SYSTEM MATURITY MATRIX *(U.S. Air Force)*

An acquisition management tool used to aid management in tracking a program's technical progress and risks. The SMM links user requirements and system specifications with anticipated T&E results. It provides a metric for program monitoring and reporting so true progress toward verification of capabilities and requirements can be assessed. The SMM is coordinated with the user and OTA, and approved by the PEO or DAC. The SMM is not a substitute for a valid requirements document.

TECHNICAL EVALUATION (TECHEVAL) *(U.S. Navy)*

The developmental testing that supports the decision to send an acquisition program to OPTEVFOR for operational testing. Program managers use TECHEVAL to resolve technical issues and, in accordance with our new OPNAV directives, as a rehearsal to measure a program's readiness for OPEVAL.

TESTBEDS *(U.S. Army)*

A system representation consisting partially of actual hardware and/or software and partially of computer models or prototype hardware and/or software.

TEST AND EVALUATION CONCEPT *(U.S. Air Force)*

A road map that identifies the assumptions, rationale, test structure, and timelines AFOTEC uses to test and evaluate the operational effectiveness and suitability of a weapon system.

TEST DATA REPORT (TDR) *(U.S. Army)*

The purpose of the TDR is to provide the test execution description details, test limitations, test team observations, and the detailed structure of the authenticated test database for subsequent analysis. The actual database may be provided under separate correspondence based on the complexity, volume, and recording medium of the database. The TDR is the primary data source for oversight systems and is developed by the test team. The TDR also reports any departure from the system evaluation plan, event design plan, or any unexpected conditions encountered during the test.

TEST DATA SCORING BOARD *(U.S. Air Force)*

Government-only forum that compiles, reviews, and scores R&M data to be used in OT&E computations.

TEST DIRECTOR (TD) *(U.S. Marine Corps)*

Marine tasked to execute the OT&E Detailed Test Plan (DTP), as designed by MCOTEA's Operational Test Project Officer (OTPO).

TEST DIRECTOR'S REPORT (TD'S REPORT) *(U.S. Marine Corps)*

Report prepared by the OT&E evolution Test Director for submission to MCOTEA; used in preparation of MCOTEA's Initial Evaluation Report (IER).

TEST INSTRUMENTATION *(U.S. Army)*

Scientific or technical equipment used to measure, sense, record, transmit, process text, or display data during materiel testing and examination. Test instrumentation equipment is used to create test environments representative of natural and battlefield conditions. It is also simulators or system stimulators used for measuring or depicting threat or training, teaching, and proficiency during testing; or targets used to simulate threat objects when destruction of real objects is not practical.

TEST MANAGER (TM) *(U.S. Air Force)*

The person designated as the focal point for test planning execution and reporting.

TEST PLANNING DOCUMENT (TPD) *(U.S. Marine Corps)*

Document, usually message, used to request resources; includes test concept and test schedule for a specific OT&E evolution. A "warning order" to the Fleet Marine Forces (FMF) that MCOTEA will require support for the event discussed.

TEST PLANNING WORKING GROUP *(U.S. Air Force)*

Formation of the TPWG, a formal interagency group, is mandatory for HQ USAF-directed test and evaluation. The program manager (PM) establishes a TPWG to include a chairperson from the system program office (SPO) and representatives from the operating and supporting MAJCOMs and AFOTEC. Representation from the operating MAJCOM includes the program POC. When appropriate, membership will include the prime contractor and subcontractors. The TM is generally the primary AFOTEC representative to the TPWG until the test readiness review briefing, at which time the TD takes over as primary representative to the TPWG.

TEST REPORT (TR) *(U.S. Army)*

The purpose of the operational TR is to provide the results of a test event conducted on a system or concept that includes findings and analysis of data collected during the test event. It may include remarks by the tester based upon data collected during the test. The operational TR is the primary reporting product for non-oversight systems and

consists of a detailed report of the test results to include, as appropriate, detailed analysis of data from the test, and an assessment of criteria and issue results based upon test data. The operational TR is written by the test team, is completed to the level of data aggregation and supporting analyses as specified by the event design plan, and reports any departures from the system evaluation plan, event design plan, or any unexpected conditions encountered during the test. The operational TR does not contain any assessments, conclusions, or judgements of overall system effectiveness, suitability, and survivability but will include observations from key personnel on the test team.

TEST RESOURCES *(U.S. Army)*

A collective term that encompasses all elements necessary to plan, conduct, collect, or analyze data from a test event or program. Elements include test funding and support manpower (including travel costs), test assets (or units under test), test asset support equipment, flying hours, fuel and other expenditures, standard ammunition, technical data, simulation models, testbeds, threat simulators, surrogates and replicas, special instrumentation unique to a given test asset or test event, and targets. Also included are tracking and data acquisition, instrumentation, and equipment for data reduction, communications, meteorology, utilities, photography, calibration, security, recovery, maintenance and repair, frequency management and control, and base or facility support services.

TEST RESOURCES PLAN (TRP) *(U.S. Air Force)*

The basic resource management document used throughout the OT&E planning process. It identifies resources required to support testing and is the basis for budget submissions, manpower plans, and procurement lead-time.

TEST SCHEDULING AND REVIEW COMMITTEE (TSARC) *(U.S. Army)*

The TSARC provides high-level centralized management of resources (including flying hours and ammunition) to maximize the use of limited resources and to minimize the impact on unit operational readiness. The TSARC as a decision making body for the Army, recommends T&E priorities, coordinates troop support, reviews schedules, reviews funding, and recommends approval of the Five Year Test Program (FYTP) and the Operational Test Instrumentation priorities. The Commander, ATEC, chairs the TSARC with membership consisting of general officer or equivalent representatives from the Army community, as appropriate.

VALIDATION *(U.S. Army)*

The process of determining the extent to which an M&S is an accurate representation of the real world from the perspective of the intended use of the M&S. Validation methods include expert consensus, comparison with historical results, comparison with test data, peer review, and independent review**.**

VERIFICATION *(U.S. Army)*

The process of determining that an M&S accurately represents the developer's conceptual description and specification. Verification evaluates the extent the M&S has been developed using sound and established software-engineering techniques.

WORKING INTEGRATED PRODUCT TEAM (WIPT) *(U.S. Army)*

WIPTs are composed of headquarters and component functional personnel who support the MATDEV by focusing on a particular topic such as T&E, cost analysis, performance analysis, and similar activities. An Integrating IPT, a type of WIPT, will coordinate all WIPT efforts and cover all topics not otherwise assigned to another WIPT. The MATDEV or his designee will usually chair WIPTs. WIPTs provide empowered functional knowledge and experience, recommendations for program success and communicate status and unresolved issues concerning their areas of responsibility.

APPENDEX 1

TEST EVENT PROCESSES

Test Event Matrix

Event	AFOTEC	ATEC	COMOPTEVFOR	MCOTEA
OT prior to MS-II	EOA	EUT/E	EOA (OT-I)	EOA
OT after MS-II and prior to MS-III but not directly supporting MS-III	OA	LUT	OA (OT-II)	OA
OT directly supporting MS-III	IOT&E/QOT&E	IOT	OPEVAL (FINAL OT-II)	IOT&E
OT after MS-III	FOT&E	FOT	FOT&E (OT-III)	FOT&E

COMOPTEVFOR PROCESSES

Navy Operational Test and Evaluation (OT&E)

OT&E is subdivided into initial OT&E (IOT&E) and follow-on OT&E (FOT&E). For each program, critical operational issues (COIs) shall be developed by OPTEVFOR and published in part IV of the TEMP. The COIs are linked to CNO requirements established in the ORD. The phases listed below shall be tailored through further sub-division, as required. IOT&E is all OT&E up to and including the completion of OPEVAL

OT-I

Early Operational Assessment (EOA). OT-I tests shall employ virtual models, advanced development models, prototypes, brass-boards, or surrogate systems. OT-I shall be conducted, when appropriate, for ACAT I programs. OT-I shall be conducted, when appropriate, for ACAT II, other programs receiving DOT&E oversight, and other ACAT programs. Early operational assessments (EOAs) are conducted during the program definition and risk reduction phase to support Milestone II. The primary objective of an EOA is to provide an early projection of a system's potential operational effectiveness and potential operational suitability.

OT-II

In most programs, at least one complete phase of OT&E is a prerequisite to start-up of the production line. The milestone decision authority (MDA) shall determine if OT&E is required prior to start-up of the production line. If there are two or more phases of OT-II, the final phase of OT-II is a formal OPEVAL. OPEVAL shall include a recommendation for fleet introduction and is a prerequisite for beyond low rate initial production (BLRIP) approval.

Operational Assessments (OAs). When the maturity of a system will not support a full operational test, an OA may be conducted. OAs can be made at any time using technology demonstrators, prototypes, mockups, or simulations, but will not substitute for the independent OT&E necessary to support full production decisions. OAs can be used to support a LRIP decision and are included in Part IV of the TEMP. For programs that have OSD oversight and an acquisition is planned, OA plans shall be briefed by appropriate OPTEVFOR staff and formally approved by DOT&E. The results of OAs may be used to support limited fleet release decision to provide assets to conduct OPEVAL. The effectiveness and suitability results will be no better than potential/potential with either a limited fleet release or continue program development recommendation depending upon system maturity.

OPEVAL. Equipment/software introduced into the tested system for OPEVAL or FOT&E shall be production representative. The level of system development shall be documented in TEMP parts III and IV. OPEVAL shall commence upon the DA's certification of readiness for operational testing unless otherwise directed by CNO (N091) or if waivers are required. OPEVAL shall not begin until after completion of TECHEVAL and receipt and consideration of the TECHEVAL results by CNO (N091) and COMOPTEVFOR. The time allotted between completion of OPEVAL and the Milestone III decision must allow 90 days for preparing the evaluation report by COMOPTEVFOR plus any additional time required by the DA to plan for discrepancy correction. Requests for earlier reporting shall be made to CNO (N091) and shall be considered on a case-by-case basis. If production or fleet introduction is not approved at Milestone III, subsequent T&E shall be identified as further phases of DT-II and OT-II. If the system is approved for acquisition of additional LRIP quantities because significant deficiencies remain, CNO may schedule an "OPEVAL Phase II", rather than retest during FOT&E.

OT-III

Follow-On Test and Evaluation (FOT&E) is all OT&E after the final phase of OPEVAL. OT-III shall be conducted, if appropriate, to evaluate correction of deficiencies in production systems, to complete deferred or incomplete IOT&E, and to continue tactics development.

Verification of Corrected Deficiencies. Conducted at the request of the PM or MDA to verify the correction of deficiencies identified in OT(generally OPEVAL or FOT&E). This evaluation shall apply to only those COIs that have been corrected and the evaluation shall not require end-to-end testing of the complete system. The DA shall submit retesting requests to CNO (N091) with an info copy to COMOPTEVFOR. The TEMP need not be updated/revised prior to a verification of correction of deficiencies. Rather, the verification of correction of deficiencies and its results shall be incorporated in the next scheduled TEMP update/revision.

Software Qualification Testing (SQT). Post-Milestone III software testing, that is solely intended for a fleet release recommendation of software, shall be conducted by COMOPTEVFOR as SQT. SQT applies to software modifications of limited scope, as determined by CNO (N091), such as aircraft and weapons systems operational flight programs (OFPs) and other systems in which software provides a similar function. When a program is approved for SQT, CNO (N091) shall assign a Test and Evaluation Identification Number (TEIN) , when required. If a new TEIN is assigned, a SQT TEMP shall be written. For SQT, a statement of functionality prepared by the DA and approved by the program sponsor shall be used to develop the SQT TEMP.

1. Software Release to the Fleet for Existing Hardware Platforms. There is no need to re-evaluate hardware reliability, maintainability, availability, and logistics supportability for new software releases for existing hardware platforms, unless other deficiencies exist which require re-evaluation.

2. Software Release to the Fleet for New Hardware Platforms. An OPEVAL or FOT&E is required for full fleet release (FFR) of existing software ported to a new hardware platform.

Statement of Functionality

The PM shall forward a Statement of Functionality to COMOPTEVFOR, via the program sponsor, copy to CNO (N912). The program sponsor's endorsement will serve as validation of software requirements for that intended release. The statement of functionality shall define:

1. New capabilities of the improved software.

2. Corrections to previous deficiencies that the new software is intended to correct.

3. Any capabilities that were deleted.

4. Description of the breadth and depth of regression testing conducted.

5. Specific operational requirement(s) the new software will address.

6. Safety and/or security issues or functions added, modified, or deleted.

Combined DT&E/OT&E

During combined DT and OT it may be necessary for a dedicated period of OT. This dedicated period, generally near the end of combined testing, is necessary for COMOPTEVFOR to evaluate system performance in an operationally representative environment as possible. COMOPTEVFOR shall participate in DT&E planning, monitor DT&E, assess relevant OT&E issues, and provide feedback to the DA. The Acquisition Coordination Team (ACT) is encouraged to facilitate this planning process. Specific conditions and responsibilities, including the sharing of test data, shall be outlined via a memorandum of agreement (MOA) between the DA and COMOPTEVFOR. The MOA must address the statutory limitations on contractor involvement in operational testing. **TECHEVAL and OPEVAL shall not be combined.**

AFOTEC PROCESSES

Combined Testing -- Testing conducted by the developmental and operational testers to achieve cost and schedule advantages. The high cost or lack of sufficient test articles provides a great incentive for DT&E and OT&E teams to share test resources and data. Combined testing usually ends with a phase of dedicated OT&E.

Operational Utility Evaluation (OUE) -- Highly streamlined, flexible OT&E activities designed to obtain quick-look assessments of military worth. They are used anytime testing does not fall into one of the other major categories of OT&E. OUEs are highly flexible in planning and reporting formats, and adjustable to customer needs. They are conducted outside the normal scope of operational testing activities, and are limited in time, scope, and resources. They may be used when required information cannot be obtained from OT&E, but will not be used in lieu of IOT&E, QOT&E, or FOT&E.

Early Operational Assessment (EOA) -- An operational assessment (OA) conducted before or at MS II (DoD Acquisition Deskbook).

Operational Assessment (OA) -- An analysis of potential operational effectiveness and suitability made by an independent operational test activity, with user support as required, on other than production systems. The focus of an operational assessment is on significant trends noted in development efforts, programmatic voids, areas of risk, adequacy of requirements, and the ability of the program to support adequate operational testing. Operational assessments may be made at any time using technology demonstrators, prototypes, mockups, engineering development models, or simulations, but will not substitute for the independent OT&E necessary to support full production decisions

Qualification Operational Test and Evaluation (QOT&E) -- The operational testing performed on programs instead of IOT&E for which there is no RDT&E-funded development effort.

Initial Operational Test and Evaluation (IOT&E) -- The operational test and evaluation conducted on production or production-representative articles to help decide whether to proceed beyond low-rate initial production. IOT&E is conducted to measure how well the system attains operational effectiveness and suitability (DOD 5000.2-R).

Follow-on Operational Test and Evaluation (FOT&E) -- The continuation of IOT&E or QOT&E activities past the MS III decision. FOT&E answers specific questions about unresolved COIs and test issues, or completes areas not finished during the I/QOT&E. It ensures the initial system acquisition process is complete.

Software Verification and Validation (V&V) – An independent software assessment process structured to ensure that the computer program fulfills the requirements stated in system and subsystem specifications and satisfactorily performs the functions required to meet the user's and supporter's needs in the operational environment. V&V consists of three essential elements: independence, verification and validation.

Verification, Validation & Accreditation (VV&A) --
(1) Verification: The process of determining that a model implementation accurately represents the developer's conceptual description and specifications.
(2) Validation: The process of determining
(a) the manner and degree to which a model is an accurate representation of the real-world from the perspective of the intended uses of the model, and
(b) the confidence that should be placed on this assessment.
(3) Accreditation: The official certification by users that a model or simulation is acceptable for use for a specific purpose. VV& A is a continuous process in the life cycle of a model as the model gets upgraded or is used for different applications.

ATEC PROCESSES

Early User Test or Experimentation (EUT/E): Testing or experimentation that employs user personnel during the proof of principle (or Program Definition and Risk Reduction) phase before entering the Engineering and Manufacturing Development Phase (i.e., pre-milestone II). The purposes are to test a materiel concept, to support planning for training and logistics, to identify interoperability problems and future testing requirements, and to provide data for an operational evaluation to support the milestone I or II decision.

Concept Experimentation Program (CEP): The CEP provides the combat developer (U.S. Army Training and Doctrine Command (TRADOC)) with a quick reaction and simplified process to resolve combat development, doctrinal, and training issues. It is a warfighting experimentation program that provides the ability to investigate the military utility of and capitalize on technologies, materiel, and warfighting ideas. It also solidifies combat development requirements and supports early milestone decisions. In addition, CEP tests are used to provide an experimental database for requirements documents and to expedite the materiel acquisition process. CEP tests are not to be used as the primary data source to support production decisions.

Force Development Test or Experimentation (FDT/E): The testing conducted early to support the force development and materiel development processes by examining the effectiveness of existing or proposed concepts of training, logistics, doctrine, organization, and materiel. FDT/E tests are conducted early and can be scheduled as needed during any phase of the acquisition process. They may be related to, combined with, or used to supplement operational testing. During the requirements formulation effort, FDT/E tests may be used to determine essential and desirable capabilities or characteristics of proposed systems. Before milestone II, FDT/E tests are used to assist in refining concepts of employment, logistics, organization and personnel, training, and in lieu of early operational testing when operational issues are adequately addressed. FDT/E tests also include field experiments designed to gather data through instrumentation to address a training development problem or to support simulations, war-games, and other analytical studies.

Limited User Test (LUT): A LUT is any type of RDTE funded operational test conducted between milestone II and milestone III other than the IOT. The LUT normally addresses a limited number of operational issues. The LUT may be conducted to provide a data source for operational assessments in support of LRIP decisions and for reviews conducted before IOT. The LUT may be conducted to verify fixes to problems discovered in IOT that must be verified prior to milestone III (that is, the fixes are of such importance that verification cannot be deferred to the FOT&E). The LUT is not used to circumvent requirements for an IOT before a full-production decision as prescribed by statute and DOD directives.

Initial Operational Test and Evaluation (IOT&E): The dedicated field test and evaluation, under realistic combat conditions and employing typical user personnel, of production or production-representative items of weapons, equipment, or munitions. The purpose of the IOT&E is to provide data to determine the operational effectiveness, suitability, and survivability of these items for use by representative military or civilian users. An IOT&E is required prior to full-rate production and fielding. An IOT&E will not be combined with DT.

Follow-on Operational Test and Evaluation (FOT&E): The test and evaluation conducted during and after the production phase to refine information obtained during the IOT&E. The FOT&E is also used to provide data to evaluate system changes or improvements and to provide data to reevaluate the system to ensure that it continues to meet operational needs.

Software Qualification Test (SQT): A system test conducted by the developmental tester using live-data files supplemented with user-prepared data and executed on target hardware. The objectives of the SQT are to obtain Government confirmation that the design will meet performance and operational requirements and to determine the adequacy and timeliness of any corrective action indicated by previous testing. The SQT is typically conducted during the Engineering and Manufacturing Development phase between milestones II and III.

Combined DT/OT: Combined DT/OT is a single test event conducted in distinct phases to produce data to answer developmental and operational system issues. In combined DT/OT, there is a DT phase and an OT phase with the DT test officer in charge of the DT phase and the OT test officer in charge of the OT phase. The DT phase focuses on generation of technical data and may permit program manager (PM) and system contractor involvement. The OT phase focuses on generation of operational test data with limited PM involvement and no system contractor involvement.

Integrated DT/OT: Integrated DT/OT is an event that generates data to address developmental and operational issues simultaneously under operational conditions. The test team in charge of this event is determined through coordination within ATEC's Developmental Test Command (DTC) and Operational Test Command (OTC) based on the requirements of the program and the test. Integrated DT/OT events will comply with statutory requirements found in Title 10, Section 2399, United States Code and the regulatory requirements found in DOD Regulation 5000.2-R and AR 73-1. As a general rule, DT/OT (combined or integrated) is more appropriate earlier rather than later in the T&E program.

Customer Test (CT): A test conducted by ATEC for a customer or requesting agency external to ATEC. The requesting agency coordinates support requirements and provides funds and guidance for the test. The test is not directly responsive to independent evaluation in support of a milestone decision review and is not scheduled or approved by the Army's Test Schedule and Review Committee (TSARC) unless external sources are required for test support.

Modeling & Simulation (M&S): A model is a representation of an object, system or process (or part thereof) in mathematical, physical, or logical terms. A simulation is a technique for experimentation in which the operation and dynamics of a real-world system are represented by the exercise of some different system, usually involving one or more models. M&S can be used to assist test planning, enhance instrumentation, serve as a test driver, serve as an additional source of data required for evaluation, and save valuable resources during the conduct of a test. Accreditation of modeling and simulation is required when the results directly or indirectly are used in an evaluation report. As a condition for proceeding beyond low-rate initial production, the system evaluation may not be comprised of data based solely on computer modeling or simulation.

Verification: The process of determining that a M&S accurately represents the developer's conceptual description and specification. Verification evaluates the extent the M&S has been developed using sound and established software-engineering techniques.
Validation: The process of determining the extent to which a M&S is an accurate representation of the real world from the perspective of the intended use of the M&S. Validation methods include expert

consensus, comparison with historical results, comparison with test data, peer review, and independent review.

Accreditation: Accreditation is the official determination that a model, simulation, or federation of M&S is acceptable for use for a specific purpose. ATEC accredits all M&S that appreciably affect an overall system evaluation (i.e., any M&S planned as a primary data source to supplement test data). The accreditation authority is the approver of the evaluation or assessment document. Any M&S used to support or supplement T&E, which in turn supports an independent evaluation or assessment, must be accredited by ATEC.

Test Report (TR): The purpose of the operational TR is to provide the results of a test event conducted on a system or concept that includes findings and analysis of data collected during the test event. It may include remarks by the tester based upon data collected during the test. The operational TR is the primary reporting product for non-oversight systems and consists of a detailed report of the test results to include, as appropriate, detailed analysis of data from the test, and an assessment of criteria and issue results based upon test data. The operational TR is written by the test team, is completed to the level of data aggregation and supporting analyses as specified by the event design plan, and reports any departures from the system evaluation plan, event design plan, or any unexpected conditions encountered during the test. The operational TR does not contain any assessments, conclusions, or judgements of overall system effectiveness, suitability, and survivability but will include observations from key personnel on the test team.

Test Data Report (TDR): The purpose of the TDR is to provide the test execution description details, test limitations, test team observations, and the detailed structure of the authenticated test database for subsequent analysis. The actual database may be provided under separate correspondence based on the complexity, volume, and recording medium of the database. The TDR is the primary data source for oversight systems and is developed by the test team. The TDR also reports any departure from the system evaluation plan, event design plan, or any unexpected conditions encountered during the test.

System Evaluation Report (SER): The ATEC SER provides the decision authority with an independent evaluation of (or progress toward achieving) a system's effectiveness, suitability, and survivability for the milestone decision reviews. The SER is a system level report that integrates the information from various event-level reports into an overall assessment of the system.

System Assessment (SA): The SA provides an assessment of the progress toward achieving system requirements and resolution of issues. The SA is not tied to a milestone decision review, but is developed as required. It is typically produced as input to non-milestone decisions and to support system evaluation. It may identify needed modifications; provide information on tactics, techniques, doctrine, organizations, and personnel requirements; and evaluate the system's logistical supportability. The scope of issues addressed by the SA is flexible because it may or may not cover all aspects of effectiveness, suitability, and survivability.

System Analysis Report (SAR): The purpose of the SAR is to document the analysis that supports ATEC recommendations in a SER and - when required, in a SA. The SAR provides the analysis supporting a SER in enough detail to allow anyone to reconstruct the data and perform analyses without having to rely on the original analyst's or evaluator's expertise. The SAR provides the analysis supporting a SA only when the analysis is too detailed for inclusion in the SA.

MCOTEA PROCESSES

1. MCOTEA's mission is to support the Acquisition Process, so our testing is focused on ACAT programs. Our non-acquisition role, ACTDs for example, is limited and not covered here. All our Testing is designed to comply with existing statutes, and DOD, Department, and Service guidance.
2. MCOTEA does 2 types of Operational Testing (OT): Operational Assessments and Operational Test and Evaluation.

For Operational Assessments, there are 2 types: Early Operational Assessments (EOAs) and Operational Assessments (OAs)

For Operational Test and Evaluation, there are 2 types: Initial Operational Test and Evaluations (IOT&Es) and Follow-on Operational Test and Evaluation (FOT&Es).

When more than one EOA, OA, IOT&E, or FOT&E occurs for a program, they are numbered sequentially, starting at one.

Plans for all EOAs & OAs are documented in Detailed Assessment Plans (DAPs). Results from all EOAs & OAs are reported in Independent Assessment Reports (IARs).

Plans for all IOT&Es & FOT&Es are documented in Detailed Test Plans (DTPs). Results from all IOT&Es & FOT&Es are reported in Independent Evaluation Reports (IERs).

3. MCOTEA uses the same names for its types of OT, its Plans, and its Reports, for Single- and Multi-Service programs.

Similarly, MCOTEA uses the same names, regardless of whether the T&E is OT alone or a combined DT/OT.

4. The type of Operational Testing used depends on how far along the Acquisition Process the system under test has progressed:

EOAs are done up to and including MS-II. OAs are done between MS-II & MS-III, but not in specific support of MS-III (an example would be in support of an LRIP decision). IOT&Es are done between MS-II & MS-III, and in specific support of MS-III. FOT&Es are done after MS-III.

In tabular form:

Process Location	OT Type	Plan Name	Report Name
< or = MS-II	EOA	DAP	IAR
> MS-II			
not support MS-III	OA	DAP	IAR
support MS-III	IOT&E	DTP	IER
> MS-III	FOT&E	DTP	IER

The content of the OT and these documents varies widely, reflecting the complexity of the system under test, and the Test Tailoring that goes on within each individual program.

5. MCOTEA's OT is ORD-based. Actual performance being determined and evaluated with respect to ORD-required performance.

6. EOAs & OAs are unconstrained compared to IOT&E & FOT&E. For example:

EOAs & OAs	IOT&E & FOT&E
Contractor participation unconstrained by USC Title 10	Contractor participation limited by USC Title 10
Test articles do not have to be Production Representative	Production or Production Representative test articles required
Number of Test Articles not determined by OTA	Number of Test Articles determined by OTA
Testing does not have to be done in a realistic operational environment	Testing must be done in a realistic operational environment

-valid threats not required -typical users not required -laboratory environment OK	-valid threats required -typical users required -field environment required
Independent phase of OT not required when part of combined DT/OT	Independent phase of OT required when part of combined DT/OT